

LPDES PERMIT NO. LA0001287, AI No. 1304

LPDES STATEMENT OF BASIS
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

- I. **Company/Facility Name:** Sterling Sugars, Inc.
Sterling Sugar Factory
Post Office Box 572
Franklin, Louisiana 70538
- II. **Issuing Office:** Louisiana Department of Environmental Quality
(LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
- III. **Prepared By:** Sonja Loyd
Industrial Permits Section
Water Permits Division
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Date Prepared: August 20, 2009

IV. **Permit Action/Status:**

A. **Reason For Permit Action:**

Proposed reissuance of an expired Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.2301, 4901, and 4903.

- B. **LPDES permit - LPDES permit effective date:** July 1, 2004
LPDES permit expiration date: June 30, 2009
EPA has not retained enforcement authority.

- C. **Application received on December 29, 2008 with additional information submitted via email on August 28, 2009, December 21, 2009, and December 22, 2009.**

V. **Facility Information:**

- A. **Location -** 609 Irish Bend Road in Franklin, St. Mary Parish
(Latitude 29°48'12", Longitude 91°29'37")

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- B. Applicant Activity - According to the application, Sterling Sugars, Inc., Sterling Sugar Factory, is an existing raw cane sugar factory which produces sugar and molasses.
- C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903)

Guideline

Reference

Louisiana Raw Cane Sugar

40 CFR 409, Subpart D

Raw Cane Sugar Processing

LAC 33:IX.707.D.2

Other sources of technology based limits:

Current LPDES permit (effective July 1, 2004)

Best Professional Judgement

- D. Fee Rate -
1. Fee Rating Facility Type: Minor
 2. Complexity Type: II
 3. Wastewater Type: II
 4. SIC code: 2061

VI. Receiving Waters:

STREAM - Yellow Bayou via local drainage

BASIN AND SUBSEGMENT - Vermilion-Teche River, Subsegment No. 060501

DESIGNATED USES -

- a. primary contact recreation
- b. secondary contact recreation
- c. fish and wildlife propagation
- d. drinking water supply

VII. Outfall Information:

Outfall 004

- A. Type of wastewater - process wastewater (comprised of wastewater from filter mud and fly ash, cane washwater, barometric condenser cooling water, floor washwater, and overflow from spray cooling pond), treated sanitary wastewater, and stormwater runoff
- B. Location - at the point of discharge from the first 200-acre pond prior to combining with the waters of the second 200-acre pond at Latitude 29°47'33", Longitude 91°28'13".

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- C. Treatment - treatment of these wastewaters consists of:
 - sedimentation
 - stabilization ponds
 - package treatment plant (sanitary wastewater only)
- D. Flow - Seasonal, 1.7 MGD (Max 30-Day) [NOTE: Based on the flow values reported on the permittee's DMRs for the monitoring period of September 2007 through September 2009.]
- E. Receiving waters - Yellow Bayou via local drainage
- F. Basin and subsegment - Vermilion-Teche River Basin, Subsegment No. 060501

Outfall 005

- A. Type of wastewater - process wastewater (comprised of wastewater from filter mud and fly ash, cane washwater, barometric condenser cooling water, floor washwater, and overflow from spray cooling pond), treated sanitary wastewater, and stormwater runoff
- B. Location - at the point of discharge from the second 200-acre pond prior to combining with the waters of Yellow Bayou at Latitude 29°47'26", Longitude 91°27'01".
- C. Treatment - treatment of these wastewaters consists of:
 - sedimentation
 - stabilization ponds
 - package treatment plant (sanitary wastewater only)
- D. Flow - Seasonal, 2.22 MGD (Max 30-Day) [NOTE: Based on the flow values reported on the permittee's DMRs for the monitoring period of September 2007 through September 2009.]
- E. Receiving waters - Yellow Bayou via local drainage
- F. Basin and subsegment - Vermilion-Teche River Basin, Subsegment No. 060501

VIII. Proposed Permit Limits:

Summary of Proposed Changes From the Current LPDES Permit:

- A. A provision will be added in Part II.H which requires the permittee to submit analytical data for Outfall 005 as required by the Water Quality Regulations in accordance with Section III.C.4 of the IND Application. Based on information provided in the 2008 Application, the permittee indicated that Outfalls 004 and 005 discharge substantially identical effluents. Therefore, the permittee may

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test the effluent of Outfall 005 and report that the analytical data also applies to Outfall 004 to satisfy the requirements of this provision. The permittee will not need to re-submit analytical data that was provided in the 2008 Application. This provision will require the facility to submit analytical data within one (1) year after the effective date of the permit. Upon submittal of the analytical data, the LDEQ may choose to modify this permit to change the effluent limits based on this information.

- B. The provision in the Part II conditions that required submittal of DMRs to the Acadiana Regional Office will be removed from the permit since all DMRs sent to the Office of Environmental Compliance/Permit Compliance Unit are now scanned into Electronic Document Management System (EDMS) which is accessible to all LDEQ personnel.

IX. Permit Limit Rationale:

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit.

Outfall 004 and 005 - process wastewater (comprised of wastewater from filter mud and fly ash, cane washwater, barometric condenser cooling water, floor washwater, and overflow from spray cooling pond), treated sanitary wastewater, and stormwater runoff

Sterling Sugars, Inc., Sterling Sugar Factory is subject to Best Practicable Control Technology Currently Available (BPT) and Best Conventional Pollutant Control Technology (BCT) effluent limitation guidelines listed below:

Manufacturing Operation

Guideline

Louisiana Raw Cane Sugar

40 CFR 409, Subpart D

Raw Cane Sugar Processing

LAC 33:IX.707.D.2

PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY (*1)
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Flow, MGD	Report	Report	---	---	1/week
BOD ₅	---	---	10	15	1/week
TSS	---	---	---	50	1/week

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PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY (*1)
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Dissolved Oxygen	---	---	4 (Avg)	3 (Min)	1/week
pH (Standard Units)	---	---	6.0 (Min)	9.0 (Max)	1/week

(*1) When discharging.

Site-Specific Consideration(s)

Flow - monitoring requirements are established in accordance with LAC 33:IX.2707.I.1.b. These requirements are consistent with the current permit.

BOD₅ and TSS - limits are based on the Water Quality Regulations cited at LAC 33:IX.707.D.2.c and the current permit.

Annual average mass limits for BOD₅ and TSS will be established to comply with the federal guidelines cited at 40 CFR 409, Subpart D [409.42(b)]. The annual average limits for BOD₅ and TSS permitted to be discharged shall be calculated by multiplying the total tons of gross cane ground from the last season in which cane was ground by 1.26 lbs/ton and 0.94 lbs/ton, respectively. A reporting requirement will also be established that requires the permittee to report on an annual basis the total pounds of BOD₅ and TSS discharged, the total number of days that a discharge occurred, and the tons of gross cane ground during the last season in which cane was ground.

DO - limits are based on the Water Quality Regulations cited at LAC 33:IX.707.D.2.c and the current permit.

pH - limits are established in accordance with LAC 33:IX.1113.C.1. These requirements are consistent with the current permit.

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STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENTS

In accordance with LAC 33:IX.2707.I.3 and 4 [40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all storm water discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow. **For first time permit issuance**, the Part II condition requires a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit. **For renewal permit issuance**, the Part II condition requires that the Storm Water Pollution Prevention Plan (SWP3) be reviewed and updated, if necessary, within six (6) months of the effective date of the final permit. If the permittee maintains other plans that contain duplicative information, those plans could be incorporated by reference to the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of stormwater associated with industrial activity, as defined in LAC 33:IX.2522.B.14 [40 CFR 122.26(b)(14)].

TMDL Waterbodies

Subsegment No. 060501 of the Vermilion-Teche River Basin is not listed on the 2006 Final Integrated 303(d) List as impaired since the all of the Total Maximum Daily Loading (TMDL) reports have been completed for this subsegment. The pollutants of concern were Phosphorus, Nitrogen (Nitrate + Nitrite as N), Organic Enrichment/Low Dissolved Oxygen (DO), Suspended Solids/Turbidity/Siltation, and Sedimentation. However, Phosphorus and Turbidity were delisted as pollutants of concern. The remaining pollutants of concern have been addressed in the following TMDL assessments: (1) *Bayou Teche Watershed TMDL for Dissolved Oxygen including WLAs for Twenty-Two Facilities and Addressing Nutrients* (finalized February 25, 2000) and (2) *TMDL for TSS, Turbidity, and Siltation for the Bayou Teche Watershed* (finalized May 2, 2002). A summary of the findings from these TMDL reports was documented in the 2003 Statement of Basis for the current permit. No wasteload allocations were assigned to this facility based on these TMDLs. No updates have been made to these TMDLs since the issuance of the current permit.

X. Compliance History/DMR Review:

- A. LDEQ records were reviewed for the period of December 2007 through December 2009. No water enforcement actions were issued during this time period. However, an air enforcement action (AE-CN-09-0279) was issued to this facility on September 24, 2009. There are no other open enforcement actions listed for this facility under any other media during this time period.

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- B. A DMR review of the monitoring reports covering the monitoring period of July 2004 through September 2009 revealed the following effluent violations:

DATE	PARAMETER	OUTFALL	REPORTED VALUE	PERMIT LIMITS
08/07	BOD ₅	004	26 mg/L	15 mg/L (daily maximum)
08/07	BOD ₅	005	25 mg/L	15 mg/L (daily maximum)
07/09	BOD ₅	004	34 mg/L	15 mg/L (daily maximum)
07/09	BOD ₅	005	31 mg/L	15 mg/L (daily maximum)

A compliance referral was forwarded to the Office of Environmental Compliance/Water Enforcement Division on January 12, 2010, for the effluent excursions noted above in the July 2009 DMRs.

- C. The most recent inspection was conducted on November 27, 2007. The inspection report noted the following: (1) the permittee failed to maintain annual inspection records related to the SWP3 as required by their permit and (2) a DMR review revealed two effluent violations as reported above in Section X.B for the monitoring period of August 2007.

On January 7, 2008, the LDEQ sent a Notice of Deficiency (NOD) to the permittee regarding the violations found during the November 2007 Inspection. On or about January 9, 2008, the permittee submitted a response to the NOD letter which outlined the course of action that would be taken to correct the violations. On or about January 16, the LDEQ sent a Deficiency Clear Letter to the permittee which indicated that all of the areas identified in the NOD letter had been addressed.

XI. Endangered Species:

The receiving waterbody, Subsegment No. 060501 of the Vermilion-Teche River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

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XII. Historic Sites:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XIII. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

XIV. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List